

Title (en)  
HIGH YIELDS, HIGH PURITY MELAMINE MANUFACTURING PROCESS

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON HOCHREINEM MELAMIN IN HOHEN PRODUKTAUSBEUTEN

Title (fr)  
PROCEDE DE FABRICATION DE MELAMINE TRES PURE A RENDEMENTS ELEVES

Publication  
**EP 1240151 B1 20050831 (EN)**

Application  
**EP 00985779 A 20001207**

Priority  
• IT 0000508 W 20001207  
• IT MI992684 A 19991222

Abstract (en)  
[origin: WO0146159A2] The process to recover both melamine and oxyaminotriazines (OAT) from the mother liquors of melamine crystallisation comprising the following steps: a) addition to a melamine and OAT containing aqueous solution at high temperature of an alkaline agent until the solution pH reach a value equal or higher than 11; b) most of melamine crystallisation by solution cooling; c) separation and recovery of precipitated melamine; d) acidification of the obtained solution, after precipitated melamine separation, in order to reach a pH of about 7; e) the suspension obtained in d) above after precipitated melamine recovery, is subject to filtration according to tangential filtration technique obtaining a clear permeate which contains as a solution all melamine which did not precipitate in step b) and a retentate comprising of OAT dispersion; f) OAT deprived mother liquors from e) are recycled to row melamine solution preparation step; in such a way almost the total amount of melamine, which did not precipitate in step b), is recovered; g) OAT are recovered from step e) retentate by using any conventional separation technics.

IPC 1-7  
**C07D 251/60**; C07D 251/62; C07B 63/00

IPC 8 full level  
**C07D 251/60** (2006.01); **C07D 251/62** (2006.01)

CPC (source: EP KR US)  
**C07D 251/60** (2013.01 - EP KR US); **C07D 251/62** (2013.01 - EP KR US)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 0146159 A2 20010628**; **WO 0146159 A3 20010927**; AR 027025 A1 20030312; AT E303368 T1 20050915; AU 2220001 A 20010703; BR 0016905 A 20021022; CA 2394815 A1 20010628; CN 1240689 C 20060208; CN 1434809 A 20030806; DE 60022387 D1 20051006; DE 60022387 T2 20060614; EA 003868 B1 20031030; EA 200200701 A1 20030227; EG 22709 A 20030730; EP 1240151 A2 20020918; EP 1240151 B1 20050831; ES 2248158 T3 20060316; IT 1315265 B1 20030203; IT MI992684 A0 19991222; IT MI992684 A1 20010622; KR 100687097 B1 20070227; KR 20020075384 A 20021004; MY 124498 A 20060630; PL 195651 B1 20071031; PL 356324 A1 20040628; SA 01210697 B1 20060920; TW I224098 B 20041121; US 2003100758 A1 20030529; US 6891040 B2 20050510

DOCDB simple family (application)  
**IT 0000508 W 20001207**; AR P000106775 A 20001220; AT 00985779 T 20001207; AU 2220001 A 20001207; BR 0016905 A 20001207; CA 2394815 A 20001207; CN 00819085 A 20001207; DE 60022387 T 20001207; EA 200200701 A 20001207; EG 20001576 A 20001220; EP 00985779 A 20001207; ES 00985779 T 20001207; IT MI992684 A 19991222; KR 20027007990 A 20020621; MY PI20005979 A 20001220; PL 35632400 A 20001207; SA 01210697 A 20010203; TW 89126160 A 20001208; US 16844002 A 20021017